PEDIATRICS.

UNDER THE CHARGE OF

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Early Diagnosis of Measles.—BRELET (*Archives Générales de Médecine*, 1906, lxxxiii, 669) discusses the different methods suggested to make a diagnosis of measles before the rash appears. During the period of incubation this is usually considered impossible. There are two signs during this period upon which some reliance can be placed. The first is Meunier's sign, a marked loss in the weight of the child; it is usually present and appears first about the third, fourth, or fifth day of incubation and eight to ten days before the eruption; the loss in weight averages about 60 grams per day; its cause is probably a disturbance of nutrition brought about by the measles infection. Meunier says the sign may be found in the incubation period of other infectious diseases as well, but considers it of value in cases in which children have been exposed to the infection; weighing them each day will show which of them is likely to develop measles. The second sign during this period is an increase in the number of leukocytes, especially the polynuclear forms. This leukocytosis, beginning with the period of incubation, increases rapidly and attains its maximum about the sixth day before the appearance of the rash; it then diminishes during the period of eruption and in cases of uncomplicated measles a leukopenia is present. At the period of invasion a number of signs have been described, which may assist in the diagnosis before the appearance of the rash, but the only one pathognomonic of the disease is Koplik's sign. It consists of rose-colored or bright-red spots having bluish-white centres; they are found on the mucous membrane of the cheeks and lips. The red spots, at first small and rounded, enlarge and may unite with the neighboring spots. The central point is the pathognomonic sign; it is very small, being from 0.2 to 0.6 mm. in diameter, is slightly raised and only removed from the surface with difficulty; the mucosa upon which the spot rests often presents a roughened appearance, which is very characteristic. Koplik's spots do not ulcerate; they disappear in three or four days. They may be few in number or very numerous, and never occur on the gums. They appear usually three days before the eruption and occur in from 80 to 100 per cent. of the cases. During the period of incubation, therefore, a diagnosis is rarely possible. At the stage of invasion, the presence of Koplik's spots, appearing as they do several days before the cutaneous rash, makes the diagnosis of measles certain.

Examination of Milk Bought in the Leipzig Market, with Special Reference to Streptococci.—H. BRUENING (*Jahrbuch f. kinderheilkunde*, 1906, lxii, 1–22) reports having examined 40 samples of milk

(12 sterilized, 26 raw full milk, 2 buttermilk) during the summer months of 1904. Of the samples of raw milk, 7 were amphoteric, and 19 alkaline; the fat maximum was 4.05 per cent., the minimum 2.19 per cent., the average amount being 3.12 per cent.; 5 samples did not reach the amount of fat prescribed by law (2.8 per cent.). The 12 samples of sterilized milk were all free of bacteria; of the other 28 samples, 26 (93 per cent.) contained streptococci in varying quantities; 2 samples had 100 organisms to the c.c., 6 had 1000, 8 had 10,000, 8 had 100,000, and 2 had 1,000,000. There were two varieties of streptococci: the first, Gram-positive, composed of thick individuals, a few making a chain; they produced death in white mice within twenty-four hours. A second group consisted of Gram-negative, narrow diplococci, as well as similarly arranged Gram-positive organisms, non-pathogenic to white mice and guinea-pigs. The streptococci were not present in milk immediately after milking, as proved by a number of samples taken directly from the animals; they entered the milk during transmission to market and are probably chiefly saprophytic. When fed to animals they were found to be absolutely innocuous, but as epidemics of dysentery have been reported in cases in which the only organisms found were these same non-pathogenic bacteria, these streptococci deserve attention at the hands of bacteriologists and specialists in children's diseases. A number of observers have discussed the possibility of a relation between them and the summer diarrhœas of children.

Bronchopneumonia and Pyemia following Measles.—J. McKenzie (*Lancet*, 1906, i, 1315) reports the case of a child of twenty months, with a history of having been in good health and found suffering from an attack of measles associated with delirium. The rash appeared on the fourth day of the illness, and on that date, except for the delirium, there was nothing exceptional about the case. On the sixth and seventh days of the illness the rash had almost disappeared, but the temperature had not dropped to normal and the child was very restless and delirious. Evidence of commencing pulmonary consolidation could be detected at the left base, but the nervous symptoms were not such as one might expect at the beginning of an uncomplicated pneumonia with moderate temperature. No evidence of meningitis or osteomyelitis could be found. The delirium persisted until the end, which occurred on the eleventh day of the disease. The most prominent features were the persistent delirium with moderate temperature and the very rapid and advanced consolidation of the left pulmonary base. The autopsy revealed red hepatization of the lower left lobe and minute abscesses scattered over all the organs of the body. Bacteriological examination of the fluid from the lungs, spleen, pericardial and cerebrospinal cavities, showed the presence of Staphylococcus aureus. The case is curious because of the staphylococcus inducing a pulmonary consolidation; because of the rapidity with which the lower lobe became atelectatic; because of the virulence of the organism giving rise to embolic infection of the various internal organs; and because of the constitutional symptoms of the intoxication overshadowing the effects of the local pulmonary lesion.

Nervous Complications in the Typhoid Fever of Children.—G. B. Allaria (*Gazetta degli Ospedali*, 1906, xxxvii, 17) describes several cases of typhoid fever in children complicated with affections of the nervous